

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 03-017700

(43)Date of publication of application : 25.01.1991

(51)Int.Cl.

G10L 9/14

(21)Application number : 01-152633

(71)Applicant : NEC CORP

(22)Date of filing : 14.06.1989

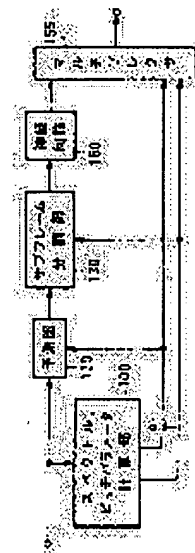
(72)Inventor : OZAWA KAZUNORI

(54) SOUND ENCODING AND DECODING SYSTEM

(57)Abstract:

PURPOSE: To obtain good synthetic sound quality which has small deterioration even when a bit rate is lowered by removing redundancy and a large dynamic range in a pitch cycle between samples of a sound signal previously by spectrum enveloping and pitch prediction, and then extracting features by a neural circuit and encoding and transmitting them.

CONSTITUTION: A spectrum and pitch parameter calculation part 100 analyzes a spectrum parameter showing the spectrum envelope of the sound signal and a pitch parameter showing the pitch cycle T from the sound signal. A prediction part 120 uses the spectrum parameter to predict a sound signal $x(n)$ and finds a predicted residue signal $e(n)$. A subframe divider 130 uses the pitch parameter to divide the predicted residue signal into subframes whose length is equal to the pitch cycle T. A predicted residue signal $e(n)$ in small sections has L samples inputted to the neural circuit 150 from the heads of the small sections in small-section intervals and the output value of an intermediate layer unit is outputted to a multiplexer 155. The excellent synthetic sound quantity is obtained by this system even at a bit rate of $\leq 10\text{kb/s}$.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]